

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re: Bentley et al.  
Filed: Concurrently Herewith  
For: POLYMER STABILIZED NEUROPEPTIDES

August 25, 2003

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

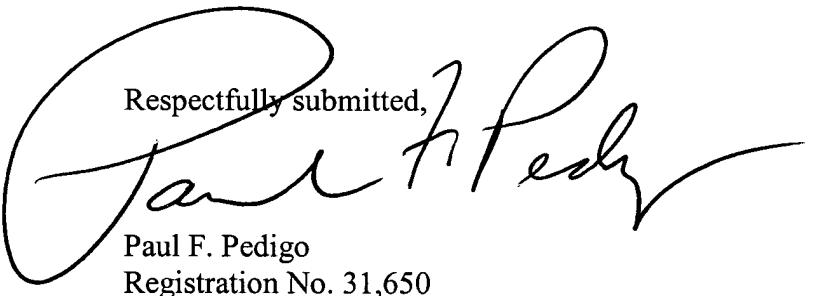
**INFORMATION DISCLOSURE STATEMENT  
CITATION UNDER 37 C.F.R. § 1.97**

Attached is a list of documents on form PTO-1449.

It is requested that the Examiner consider these documents and officially make them of record in accordance with the provisions of 37 C.F.R. § 1.97 and Section 609 of the MPEP. By submitting the listed documents, Applicant in no way makes any admission as to the prior art status of the listed documents, but is instead submitting the listed documents for the sake of full disclosure.

Any foreign patents or non-patent literature documents items are attached, except those that were supplied in, or cited by the Office during prosecution of, parent Application No. 09/678,997 filed October 4, 2000. Since the benefit of this application was claimed under 35 U.S.C. 120, no copies need to be furnished in accordance with 37 C.F.R. 1.98(d); however, copies will be furnished on request.

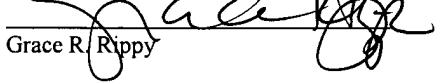
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Grace R. Rippy

<p>Substitute for form 1449A/PTO</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p><i>(Use as many sheets as necessary)</i></p>				<b>Complete if Known</b>	
				Application Number	To Be Assigned
				Filing Date	Concurrent Herewith
				First Named Inventor	Bentley et al.
				Group Art Unit	
				Examiner Name	
Sheet	1	of	3	Attorney Docket Number	034848/268660

#### **U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document Number	Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant Of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages of Relevant Figures Appear
	1	5,932,462		Harris et al.	08/03/1999	
	2	5,681,811		Ekwuribe	10/28/1997	
	3	6,024,977		Yatvin et al.	02/2000	
	4	4,179,337		Davis et al.	12/18/1979	
	5	4,462,941		Lee et al.	07/31/1984	
	6	4,468,383		Rodbard et al.	08/28/1984	
	7	4,684,624		Hosobuchi et al.	08/04/1987	
	8	4,902,505		Pardridge et al.	02/20/1990	
	9	5,017,689		Hruby et al.	05/21/1991	
	10	5,326,751		Haaseth et al.	07/05/1994	
	11	5,442,043		Fukuta et al.	08/15/1995	
	12	5,629,384		Veronese et al.	05/13/1997	
	13	5,631,322		Veronese et al.	05/20/1997	
	14	5,833,988		Friden	11/10/1998	
	15	5,932,462		Harris et al.	08/03/1999	

#### **FOREIGN PATENT DOCUMENTS**

Examiner Initials	Cite No.	Foreign Patent Document Office <sup>3</sup>	Kind Code Number <sup>4</sup> (if known) <sup>5</sup>	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
	16	WO	95/00162	A	Enzon, Inc.	01/05/1995	
	17	WO	91/16929	A	Novo Nordisk	11/14/1991	
	18	WO	00/78302	A1	Protein Delivery, Inc.	12/28/2000	
	19	WO	01/12230	A1	Park et al.	02/22/2001	

Examiner Signature		Date Considered	
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\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number.

<sup>2</sup> See attached Kinds of U.S. Patent Documents.

<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

<sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

<sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

<sup>6</sup> Applicant is to place an "X" here if English language Translation is attached.

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>7</sup> Unique citation designation number.

<sup>8</sup> See attached Kinds of U.S. Patent Documents.

<sup>9</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

<sup>10</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

11 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

<sup>12</sup> Applicant is to place an "X" here if English language Translation is attached.

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>				Application Number	To Be Assigned
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				First Named Inventor	Bentley et al.
				Group Art Unit	
Sheet 3 of 3	Examiner Name				
Sheet 3 of 3	Attorney Docket Number	034848/268660			

### NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
	25	Witt et al., "Pharmacodynamic and Pharmacokinetic Characterization of Poly(Ethylene Glycol) Conjugation of Met-Enkephalin Analog [D-Pen <sup>2</sup> , D-Pen <sup>5</sup> ]-enkephalin (DPDPE)," <i>Journal of Pharmacology and Experimental Therapeutics</i> , vol. 298, no. 2, August, 2001; pages 848-856	
	26	Kurihara, A. et al., "Epidermal Growth Factor Radiopharmaceuticals: 111In Chelation, Conjugation to a Blood Brain Barrier Delivery Vector via a Biotin-Polyethylene Linker,..." <i>Bioconjugate Chem.</i> , vol. 10, pp. 502-511, May 17, 1995	
	27	Patel D. et al., "Peptide Targetting and Delivery across the Blood-Brain Barrier Utilizing Synthetic Triglyceride Esters: Design, Synthesis and Bioactivity," <i>Bioconjugate Chem.</i> , vol. 8, pp. 434-441 (1997)	
	28	Pardridge, "Physiologic-bases strategies for protein drug delivery to the brain," <i>Journal of Controlled Release</i> , 39 pp. 281-286 (1996)	
	29	Brownlees et al., "Peptidases, Peptides, and the Mammalian Blood-Brain Barrier," <i>Journal of Neurochemistry</i> , Vol. 60, No. 3, pp. 793-803 (1993)	
	30	Friden, "Utilization of an endogenous cellular transport system for the delivery of therapeutics across the blood-brain barrier," <i>Journal of Controlled Release</i> , 46, pp. 117-128 (1996)	
	31	Pardridge et al., "Combined Use of Carboxyl-Directed Protein Pegylation and Vector-Mediated Blood-Brain Barrier Drug Delivery System Optimizes Brain Uptake of Brain-Derived Neurotrophic Factor Following Intravenous Administration," <i>Pharmaceutical Research</i> , Vol. 15, No. 4, pp. 576-582 (1998)	
	32	Kawasaki et al., "Amino Acids and Peptides. XIX. Preparation of Enkephalin-Poly(Ethylene Glycol) Hybrid and Evaluation of Its Analgesic Activity," <i>Chem Pharm Bull.</i> , 41(11) pp 2053-2054 (1993)	
	33	Maeda et al., "Amino Acids and Peptides. XXII. Preparation and Antinociceptive Effect of [D-Ala <sup>2</sup> ]Leu-Enkephalin-Poly(Ethylene Glycol) Hybrid," <i>Chem Pharm Bull.</i> , 17(6) pp 823-825 (1994)	
	34	Williams et al., "Passage of a δ-Opioid Receptor Selective Enkephalin, [D-Penicillamine <sup>2,5</sup> ] Enkephalin, Across the Blood-Brain and the Blood-Cerebrospinal Fluid Barriers," <i>J. of Neurochemistry</i> , vol. 66, No. 3, pp. 1289-1299 (1996)	
	35	Zalipsky, "Chemistry of polyethylene glycol conjugates with biologically active molecules," <i>Advanced Drug Delivery Review</i> , 16, pp. 157-182 (1995)	
	36	Zalipsky et al., "Copolymers of Lysine and Polyethylene Glycol: A New Family of Functionalized Drug Carriers," <i>Bioconjugate Chem.</i> , Vol. 4, No. 1, pp. 54-62 (1993)	
	37	Hruby et al., "Recent Developments in the Design of Receptor Specific Opioid Peptides," <i>Medicinal Research Review</i> , Vol. 9, No. 3, pp. 343-401 (1989)	

Examiner Signature		Date Considered	
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